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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
NGUYEN, PHUONGCHAU BA	
ART UNIT	**PAPER NUMBER**
2665	

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/014,153	VIERO, TIMO	
	Examiner	Art Unit	
	Phuongchau Ba Nguyen	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 September 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *34-66* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *34-44 and 48-66* is/are rejected.

7)☒ Claim(s) *45-47* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 34-63 are rejected under 35 U.S.C. 102(e) as being anticipated by Jamal (6,274,813).

Regarding claim 34:

Jamal (6,274,813) discloses a method for performing random access in a mobile communication network (fig.1) having a base transceiver station (BS-23) and a plurality of mobile stations (MS-30), comprising the steps of:

a) transmitting a parameter defining allowed access slots used between said base transceiver station and a mobile station to said mobile station {col.6, lines 5-14, 43-46};

b) determining said allowed access slots at said mobile station based on said parameter {col.6, lines 15-17, 43-46}; and

c) using at least one of said determined allowed access slots for performing a random access operation to said base transceiver station {col.6, lines 34-50}.

Regarding claim 35: Jamal further discloses wherein said parameter is transmitted via a broadcast channel {col.6, lines 5-8}.

Regarding claim 36: Jamal further discloses wherein said broadcast channel is the BCH channel of a WCDMA system {col.6, lines 5-8, 43-46}.

Regarding claim 37: Jamal further discloses wherein said random access is performed via the PRACH uplink channel and the AICH downlink channel of the WCDMA system {fig.5}.

Regarding claim 38: Jamal further discloses wherein said parameter defines a subset of available access slots of said mobile communication network {col.7, line 59-col.8, lines 6; fig.5}.

Regarding claim 39: Jamal further discloses wherein said subset is determined by another parameter transmitted from said base transceiver station to said mobile station {col.7, line 65-col.8, lines 6; col.6, lines 5-14}.

Regarding claim 40: Jamal further discloses wherein said other parameter is a timing parameter defining a transmission timing of an uplink access slot {col.7, lines 62-65}.

Regarding claim 41: Jamal further discloses wherein said other parameter is transmitted via a broadcast channel {col.6, lines 5-8}.

Regarding claim 42: Jamal further discloses wherein the bit number of said parameter is changed in dependence on said other parameter {col.7, line 65-col.8, line 6; col.9, lines 7-10, 16-19, 42-45}.

Regarding claim 43: Jamal further discloses wherein a transmission of a preamble signature or an acquisition indication is disabled in dependence of the value of said parameter {col.9, lines 37-60}.

Regarding claim 44: Jamal further discloses wherein an index of an allowed uplink access slot is calculated on the basis of the value of said parameter and a frame number of a frame used for transmitting an uplink access slot {col.7, line 65- col.8, line 6}.

Regarding claim 48: Jamal further discloses wherein an index of an allowed uplink access slot is determined on the basis of the value of said parameter irrespective of a frame number of a frame used for transmitting an uplink access slot {col.7, line 65-col.8, line 6}.

Regarding claim 49: Jamal further discloses wherein an allowed downlink slot is determined by adding a predetermined value to an index of a received uplink slot {col.7, line 65-col.8, line 6}.

Regarding claim 50: Jamal further discloses wherein said predetermined value is selected in accordance with a timing parameter defining a transmission timing of said uplink slot {col.7, lines 59-65}.

Regarding claim 51: Jamal further discloses wherein bit values of a binary expression of said parameter determines a combination of calculated indices obtained for other values of said parameter, said other values corresponding to the binary weights of said binary expression {col.9, lines 7-19}.

Regarding claim 52:

Jamal discloses a system for performing random access in a mobile communication network, comprising:

a) a network element 10 (BS) arranged for transmitting a parameter defining allowed access slots {col.6, lines 5-14, 43-46}; and

b) a plurality of mobile stations (MS) arranged for receiving said transmitted parameter, for determining said allowed access slots based on said received parameter {col.6, lines 15-17, 43-46}, and for using at least one of said determined allowed access slots for performing a random access operation to said base transceiver station 10 (BS) {col.6, lines 34-50}.

Regarding claim 53: Jamal further discloses wherein said network element is a WCDMA base transceiver station 10 (BS-23, fig.1) and said mobile station (MS, fig.1) is a WCDMA mobile station {col.6, lines 5-8, 43-46}.

Regarding claim 54:

Jamal discloses a network element (BS) for a mobile communication network comprising a plurality of mobile stations (MS), comprising:

a) setting means (74) for setting a parameter defining allowed access slots for performing a random access operation {col.6, lines 5-14, 43-46}; and

b) transmitting means (inherent at BS-23 for transmitting on BCH) for transmitting said parameter to said plurality of mobile stations (MS-30, fig.1) {col.6, lines 15-17, 43-46}.

Regarding claim 55: Jamal further discloses wherein said network element is a WCDMA base transceiver station {fig.1, BS-23}.

Regarding claim 56: Jamal further discloses wherein said transmitting means (inherent at BS-23 for transmitting on BCH) is arranged to transmit said parameter via a broadcast channel {col.6, lines 5-8, 43-46}.

Regarding claim 57: Jamal further discloses wherein said setting means (34, 36, 38, 40) is arranged to set said parameter in dependence on a timing parameter value defining a transmission timing of an uplink access slot in said random access operation {col.6, lines 34-50; col.7, line 59-col.8, line 6}.

Regarding claim 58:

Jamal discloses a mobile station for a mobile communication network having at least one network element (BS-23, fig.1) allowing a random access operation, comprising:

a) receiving means (32) for receiving a parameter defining allowed access slots for said random access operation from said network element (BS) {also, 76, fig.3};

b) determining means (34, 36, 38, 40) for determining said allowed access slots based on said received parameter {also, 80, fig.4}; and

c) transmitting means (56) for transmitting a random access message to said network element (BS) using at least one of said determined allowed access slots {also, 90, fig.4}.

Regarding claim 59: Jamal further discloses wherein said receiving means (32) is arranged to receive said parameter via a broadcast channel {col.6, lines 5-8, 43-46}.

Regarding claim 60: Jamal further discloses wherein said determining means (34, 36, 38, 40) is arranged to determine said allowed access slots on the basis of said received parameter and a timing parameter received via said broadcast channel {col.6, lines 34-50; col.7, line 59-col.8, line 6}.

Regarding claim 61: Jamal further discloses wherein said determining means (34, 36, 38, 40) is arranged to calculate an index of an allowed uplink access slot on the basis of the value of said received parameter and a frame number of a frame used for transmitting an uplink access slot {col.7, line 65- col.8, line 6}.

Regarding claim 62: Jamal further discloses wherein said determining means (34, 36, 38, 40) is arranged to determine an index of an allowed uplink access slot on the basis

of the value of said parameter irrespective of a frame number of a frame used for transmitting an uplink access slot {col.7, line 65-col.8, line 6}.

Regarding claim 63:

Jamal further discloses wherein a selection means is provided for randomly selecting from allowed access slots determined by said determining means an uplink access slot to be used for transmitting a preamble of said random access message {col.8, lines 48-60}.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 64-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jamal (6,274,813) as applied to claims 34-63 above, and further in view of Gustafsson (6,643,275).

Regarding claim 64:

Jamal discloses in figure 5 access slots but Jamal does not explicitly discloses wherein consecutive preambles are transmitted a predetermined number of access slots apart. However, in the same field of endeavor, Gustafsson (6,643,275) further

discloses wherein consecutive preambles are transmitted a predetermined number of access slots apart {fig.3; col.3, lines 3-11}. Therefore, it would have been obvious to an artisan to apply Gustafsson's teaching to Jamal with the motivation being to provide in detail the well known feature of a random access channel with a separate preamble and data portion and to use the preamble by base station to detect MS attempting the random access channel.

Regarding claim 65:

Jamal further discloses wherein said predetermined number depends on a timing parameter received by said receiving means {90, fig.4; col.7, line 59-col.8, line 6}.

Regarding claim 66:

Jamal further discloses wherein said selection means is arranged to perform said random selection any time a preamble needs to be transmitted {90, fig.4, col.7, lines 57-65}.

Allowable Subject Matter

5. Claims 45-47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed 9-17-4 have been fully considered but they are not persuasive.

A/. Applicant argued on page 13 that Jamal fails to teach transmitting a parameter defining allowed access slots used by the base transceiver station and a mobile station to the mobile station and determining the allowed access slots at the mobile station based on the parameter.

In reply, applicant is directed to column 7, line 57-column 8, line 6 in Jamal wherein the mobile station providing information to the base station that is specific to the mobile station and specific to this particular access being made by the mobile station, e.g., the specific time or time slot at which the access is made and or specific information conveyed for that access such as access reference or signature. Depending upon the specific scrambling code selection, generation, or determination procedures employed, both the mobile station and the base station use one or more of the mobile specific access parameters and stored overhead type parameters to generate the uplink scrambling code allocated to the traffic information dedicated (at least temporarily) to the mobile which is thereafter used to scramble or descramble communication over that connection. Also, in column 8, lines 48-57 in Jamal wherein each random access slot include the identification of the mobile and other parameters such as a particular signature selected by the mobile from a limited set of signatures used to further decrease the probability of collision on the access channel. That way even if a plurality of mobiles select the same access slot, they still can be individually

resolved at the base station if they have chosen different signatures. The access slot AS and signature for the uplink common control channel frame transmission are typically selected pseudo-randomly by the mobile station.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is 571-272-3148. The examiner can normally be reached on Monday-Friday from 10:00 a.m. to 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PN

Phuongchau Ba Nguyen
Examiner
Art Unit 2665

DUC HO
PRIMARY EXAMINER

3-21-05